

III. REMARKS

Claims 1-6 and 8-17 are pending in this application. Claims 5, 6, and 8-15 were previously withdrawn. By this Amendment, claim 1 has been amended and claim 7 has been cancelled. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Applicants do not acquiesce in the correctness of the rejections and reserve the right to present specific arguments regarding any rejected claims not specifically addressed. Further, Applicants reserve the right to pursue the full scope of the subject matter of the claims in a subsequent patent application that claims priority to the instant application.

In the Office Action, claims 1-4, 16, and 17 are rejected under 35 USC 112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed. Specifically, the Office alleges that Applicants' description of three species of RNA polymerase is not sufficient to describe the claimed RNA polymerases "having a significantly diminished ability to displace RNA" and that "applicant has express possession of only three particular sequences in a genus which comprises hundreds of trillions of different possibilities." Office Action at 3.

Applicants assert, however, that the Office has misinterpreted and/or misapplied The Regents of the University of California v. Eli Lilly and Co. and

Fiers v. Sugano, both of which are relied on by the Office. Applicants do not claim bacteriophages generally, as the Office seems to believe, based on its assertion that the genus “comprises hundreds of trillions of different possibilities.” Rather, Applicants claim bacteriophage RNA polymerases. Further, Applicants do not simply claim any bacteriophage RNA polymerases, but a bacteriophage RNA polymerase “having a significantly diminished ability to displace RNA that causes reduced synthesis of aberrant products on templates having protruding 3’ ends in the non-template strand.” Thus, the genus claimed by Applicants is not bacteriophages, nor is it all bacteriophage RNA polymerases.

The Office’s additional citation to Science News Online is similarly insufficient, as the reference refers to bacteriophages in general, rather than to their RNA polymerases or, as is claimed, bacteriophage RNA polymerases having a significantly diminished ability to displace RNA that causes reduced synthesis of aberrant products on templates having protruding 3’ ends in the non-template strand.

Applicants respectfully assert that the three bacteriophage RNA polymerases disclosed by Applicants comprise “a recitation of a representative number of [bacteriophage RNA polymerases] falling within the scope of the genus,” as required by Lilly. The Office has failed to cite any reference disclosing the size of the claimed genus of bacteriophage RNA polymerases, what number would constitute a representative number of species of the genus,

or that the three bacteriophage RNA polymerases described by Applicants is not representative of the genus.

Nevertheless, in order to facilitate early allowance of the pending claims, Applicants have amended claim 1 to specify the improved bacteriophage RNA polymerase enzyme as "comprising a bacteriophage SP6 RNA polymerase having a deletion of residues 140 through 143." Claim 7 has therefore been cancelled. All other rejected claims depend from claim 1. Thus, Applicants assert that the basis for the rejection has been obviated and respectfully request withdrawal of the rejection.

In the Office Action, claims 1-4, 7, 16, and 17 are rejected under 35 USC 102(e) as allegedly being anticipated by US Patent Application Publication No. 2004/0259089 to Watahiki et al.


Submitted herewith is a declaration under 37 CFR 1.131 declaring, inter alia, that prior to 07 February 1997, Applicants had conceived of the claimed invention and had thereafter diligently and actively assisted the Research Foundation of the State University of New York in the planning, preparation, review, and filing of the present application. In support of the declaration, submitted herewith is a New Technology Disclosure received by the Technology Transfer Office of the Research Foundation of the State University of New York on 10 February 1997 and a letter to Dr. Albert E. Muir dated 05 February 1997 and accompanying manuscript, each of which describes the claimed invention. These supporting documents are identified collectively as "Exhibit A."

Applicants assert, therefore, that the Watahiki et al. reference is disqualified as prior art under 35 USC 102(e) and respectfully request withdrawal of the rejection.

In the Office Action, claims 1-4, 16, and 17 are rejected under 35 USC 102 (b) as allegedly being anticipated by Lyakhov et al., J. Mol. Biol. (1997) 269:28-40. Specifically, the Office alleges that Lyakhov et al. teach a mutant T7 RNA polymerase with a 172-173 deletion and a T3 RNA polymerase with a 173-174 deletion. Applicants assert, however, that the above amendment to claim 1 to read "[a]n improved bacteriophage RNA polymerase enzyme comprising a bacteriophage SP6 RNA polymerase having a deletion of residues 140 through 143" obviates the basis for the rejection, as it incorporates the substance of cancelled claim 7, which is not rejected over Lyakhov et al. Accordingly, Applicants assert that neither claim 1 nor claims 2-4, 16, or 17, each of which depends therefrom, is anticipated by Lyakhov et al. and respectfully request withdrawal of the rejection.

In view of the foregoing, Applicants respectfully request withdrawal of the rejections and allowance of the application. Should the Examiner require anything further from Applicants, the Examiner is invited to contact Applicants' undersigned representative at the number listed below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephen F. Swinton, Jr.", written in a cursive style.

Stephen F. Swinton, Jr.

Reg. No. 53,661

Date: 27 September 2007

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